

## **AMENDMENT TO THE SPECIFICATION**

On page 20, paragraph 2, please replace as follows:

Under the SPI scenario, required routing information is obtainable from QOSPF-like protocols, and, hence, SPI is an appealing scenario from a practical viewpoint. In this scenario, information concerning the aggregate bandwidth used on each link by active paths, denoted by  $F_{ij}$ , and the aggregate bandwidth used on each link by backup paths, denoted by  $G_{ij}$ , is available. Since only aggregate information on bandwidth usage is of concern, the amount of information maintained in this scenario is independent of the number of LSPs that are currently using the network. That is, while the complete information scenario requires per-LSP information to be maintained, the partial information scenario requires information for only two types of tunnels, viz., active tunnels and backup tunnels. This is only slightly more information than the no information model which keeps track of only the total aggregate bandwidth usage. As shown below, the partial information scenario can realize significant gains in network performance, as measured by the number of rejected requests, by using a relatively small amount of additional information in comparison to the no information scenario. Results very close to the complete information scenario can be obtained. FIG. 6 shows a general flow of the present traffic routing methodincluding steps to: receive an arriving request including s, d, and b information; distribute  $F_{i,j}$  and  $G_{i,j}$

information; identify potential links (i, j) for disjoint active and backup paths;  
and formulate active and backup paths for the request including the s, d, and  
b information. After the formulate step, the routing method then repeats.